### **AMENDMENTS TO THE DRAWINGS**

The attached sheet(s) of drawings includes changes to FIGS. 1, 2, 6 and 8.

Attachment:

Replacement sheets

Annotated sheets showing changes

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#### **REMARKS**

Claims 1-5 and 7-9 have been amended. Claims 10-12 have been withdrawn as being drawn to a non-elected invention. Claims 1-9 are currently pending in this application.

Applicants reserve the right to pursue the original and other claims in this and other applications. Applicants respectfully request reconsideration in light of the above amendments and the following remarks.

Applicants appreciate the Examiner's consideration of the documents listed on the Form PTO/SB/08 that accompanied the Information Disclosure Statement filed on June 7, 2006. However, Applicants note that the reference CA has not been considered. During a telephonic interview between Examiner Malekzadeh and Applicants' representative Jennifer McCue on July 21, 2008, Examiner Malekzadeh indicated that reference CA¹ had been crossed out because only an English language abstract (and not a full translation) had been provided and that this was not indicated on the Form PTO/SB/08. Examiner Malekzadeh further indicated that he would include this reference on the Form PTO-892 (Notice of References Cited) accompanying his next communication, in order to make clear that the English portions of the reference have been considered.

Applicants additionally note that Japanese patent number JP 3378840 discussed in the Specification (referenced by the Examiner at pg. 4 of the Office Action) corresponds to JP 2001-071354, which was submitted in an Information Disclosure Statement on June 7, 2006. The Examiner indicated consideration of reference JP 2001-071354 on April 27, 2008.

Figures 1, 2, 6 and 8 are objected to. Figures 1, 2, 6 and 8 have been amended to be designated as "Prior Art." As such, Applicants respectfully submit that the figures are in condition for allowance and request that the objection be withdrawn.

<sup>&</sup>lt;sup>1</sup> Shozo Murata, et al., "Development of Heat Insulation Stamper for CD-R Media Production," Ricoh Technical Report No. 27, pp. 77-82, Nov. 2001

Claims 1, 3 and 6-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Murata et al. (U.S. Patent No. 6,468,618) ("Murata"). This rejection is respectfully traversed and reconsideration is respectfully requested.

Claim 1 recites a "heat insulating stamper with a pattern on a surface thereof for use in molding an optical disc substrate" that includes an "uppermost section made of a metal material," a "lowermost section made of the same material as the uppermost section," and a "middle section having a heat conductivity lower than the uppermost section." The middle section includes the "same metal material as the uppermost and lowermost sections" and "heat insulating portions dispersed in the metal material of the middle section."

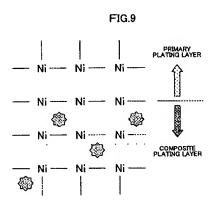
Murata relates to a stamper for molding an optical disk. The Office Action points to FIG. 5M as disclosing the claimed invention. Applicants respectfully disagree. First, if the Office Action is relying on all of layers 31, 36, 33 and 34 as disclosing the claimed stamper, then it does not have the claimed "pattern on a surface thereof for use in molding an optical disc substrate." As can be seen from the figure, FIG. 5M includes *both* the mother portion 31 and the heat insulated stamper 21 (FIG. 5N). Thus, the heat insulating stamper 21 of Murata would more accurately correspond to the claimed heat insulating stamper. If Murata is interpreted in this manner, then there is no "middle section" which includes the "same metal material as the uppermost and lowermost sections" and "heat insulating portions dispersed in the metal material of the middle section."

Second, Murata does not disclose, teach or suggest that the "heat insulating portions [are] dispersed in the metal material of the middle section," as in the claimed invention. Instead, the Office Action relies on heat insulating layer 34 and thick nickel layer 33 as forming the claimed "heat insulating portions" and "metal material," respectively, of the "middle section." These portions are separate layers and, thus, do not disclose the "heat insulating portions [being] dispersed in the metal material." The claimed configuration is important because it "not only solves the strength problem [of the prior art heat insulating stamper], but also eliminates the need for the high temperature curing." Specification, pg. 19, lines 17-19.

Accordingly, claim 1 is allowable over Murata. Claims 3 and 6-8 depend from claim 1 and are allowable along with claim 1. As such, Applicants respectfully request that the rejection of claims 1, 3 and 6-8 be withdrawn and the claims allowed.

Claims 2 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Murata (JP 2002-184046) ("Murata JP '046"). This rejection is respectfully traversed and reconsideration is respectfully requested.

Claims 2 and 4 depend from claim 1, which is allowable over Murata for at least the reasons discussed above. Murata JP '046 is relied upon as teaching "a plurality of minute voids formed on the matrix surface." Office Action, pg. 7. Murata JP '046 does not remedy the deficiencies of Murata as to claim 1. Additionally, Applicants submit that the claimed invention requires the "heat insulating portions are dispersed within a matrix of the metal material of the middle section," as shown, for example in FIG. 9 (reproduced below, next page, for convenience). The heat insulating portions (e.g., minute voids) of the claimed invention are not formed on a surface of the metal material, as is disclosed in Murata JP '046.



Accordingly, claim 1, along with claims 2 and 4, is allowable over the cited combination. Applicants respectfully request that the rejection of claims 2 and 4 be withdrawn and the claims allowed.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Fujita (JP 2001-297488) ("Fujita"). This rejection is respectfully traversed and reconsideration is respectfully requested.

Claim 5 depends from claim 1, which is allowable over Murata for at least the reasons discussed above. Fujita is relied upon as teaching that "the concentration of heat resisting substances varies in a depth direction of the insulating layer." Office Action, pg. 8. Fujita does not remedy the deficiencies of Murata as to claim 1. Accordingly, claim 1, along with claim 5, is allowable over the cited combination. Applicants respectfully request that the rejection of claim 5 be withdrawn and the claim allowed.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Murata in view of Shibata (JP 2002-083450) ("Shibata"). This rejection is respectfully traversed and reconsideration is respectfully requested.

Claim 9 depends from claim 1, which is allowable over Murata for at least the reasons discussed above. Shibata is relied upon as teaching that the "heat resisting inorganic material used in the insulating layer comprises zirconia series, alumina series, silicon carbides series, or silicon nitride series." Office Action, pg. 10. Shibata does not remedy the deficiencies of Murata as to claim 1. Accordingly, claim 1, along with claim 9, is allowable over the cited combination. Applicants respectfully request that the rejection of claim 9 be withdrawn and the claim allowed.

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In view of the above, Applicants believe the pending application is in condition for allowance.

Dated: July

, 2008

Respectfully submitted,

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Attachments

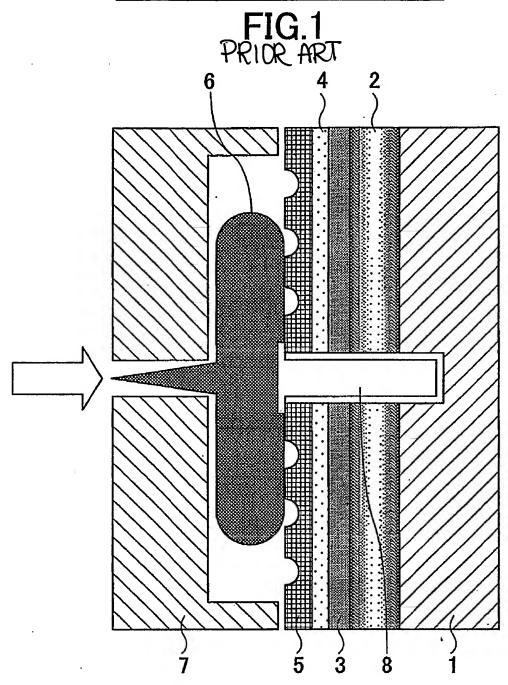
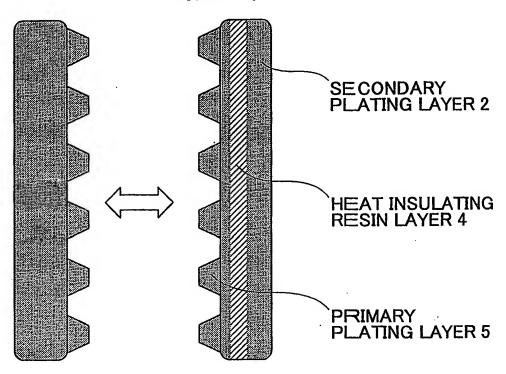
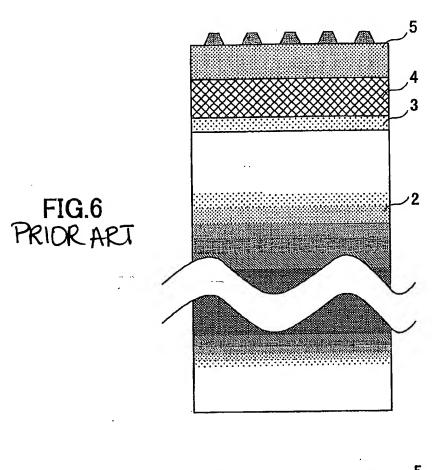


FIG.2 PRIDR ART



MOTHER STAMPER

**SON STAMPER** 



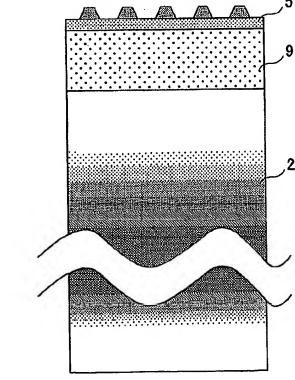


FIG.7

## FIG.8 PRIOR ART

1. GLASS MASTER PRODUCTION:
RESIST APPLICATION/EXPOSURE/PHOTO LITHOGRAPHY



2. CONDUCTION PROCESSING <1>
(Ni SPUTTERING, ELECTROLESS Ni)



3. MASTER STAMPER PRODUCTION/ SEPARATION FILM TREATMENT <1>



4. MOTHER STAMPER PRODUCTION/ SEPARATION FILM TREATMENT <2>



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5. SON STAMPER PRODUCTION: PRIMARY PLATING/ POLYMER LAYER FORMATION/CONDUCTION TREATMENT <2>/ SECONDARY PLATING FORMATION



6. SON STAMPER FINISHING: BACKSIDE GRINDING/ INNER AND OUTER SHAPE PROCESSING/INSPECTION